

RLEP News



Newsletter of the Rappahannock League for Environmental Protection
Dedicated to preserving Rappahannock County
SPRING 2005

Land-use fragmentation threatens rural economies

BY REID FOLSOM

According to Wikipedia (www.answers.com), exurb comes from “extra urban” and was coined in the 1950s “to describe the ring of prosperous rural communities beyond the suburbs that, due to availability via the new high-speed limited-access highways, were becoming dormitory communities for an urban area”

As farms become less viable, the supporting farm-equipment suppliers have to shift to selling smaller equipment; and feed, seed, and fertilizer suppliers, to selling smaller amounts.

While the suburbs keep expanding outward, exurban communities are increasingly creating “leapfrog developments” far from other population centers, further fragmenting rural and wild areas. Exurban communities account for one-quarter of the recent population growth of the lower 48 states.

This pattern of development is often unplanned and can easily fragment forests and farms, forever changing the natural, social, and economic landscape in an area. Rappahannock County is not immune to this process; it particularly threatens our comprehensive plan’s goals of

- 🌲 Maintaining a viable economy based on agricultural and tourism
- 🌲 Discouraging the conversion of land from agricultural uses to other uses that challenge the tax base
- 🌲 Preserving the viewshed
- 🌲 Preserving open space.

Fragmentation is the separation of parcels of land into ever-smaller pieces, with like uses interspersed with unlike uses. A forest cut in two by a power line or two farms separated by a townhouse development are examples.

One of the most visible, long-lasting negative impacts of fragmentation is on agriculture. Large farms are efficient, returning enough income to the farm family. The cost of equipment and other inputs are spread over many acres. As the size of the farm is reduced, more manpower per acre is needed, and costs rise. As the fragmentation continues, the land farmed does not support the farm family and off-farm income is needed to survive. Continuing fragmentation eventually shifts farming into a hobby category, where costs of inputs far exceed expected income, and soon farms pass from the scene.

When suburban or urban people move into a development that fragments an agricultural or forestry land-use area, conflicts often arise about continued routine farming and forestry activities. Dust, mud, odors, and noise are often found objectionable by the new residents, sometimes enough for these newcomers to go to court—and sometimes they win. Farms and forestry operations are then forced out of business or out of the area. More housing and commercial

Continued on next page



Fragmentation of forest and farmland by residential and commercial development, such as this housing development in the exurbs near Warrenton, threatens rural economies and culture as well as wildlife.

PHOTO BY DON AUDETTE



An aerial view of Washington, Virginia, shows the fragmentation of forest by farmland, and farmland by residential and commercial development.

Numerous studies show that small tracts (less than 25 acres) are less likely to managed for income, aesthetic, or wildlife goals. Nationwide, about 8 percent of total private forest area is now in parcels smaller than 20 acres.

According to the National Resources Defense Council, nearly one-sixth of the land developed in the United States was developed in just 10 years, from 1982 to 1992.

Not only does land-use fragmentation threaten rural economies, but it also is a serious threat to wildlife habitat (see “Wild Ideas,” page 6).

development replaces them, further increasing fragmentation.

Nonfarm economic enterprises are also affected negatively by fragmentation, particularly the separation of farm and forest areas by nonfarm uses. For example, the success of Rappahannock’s sizable bed-and-breakfast industry is largely due to the rural and scenic beauty of the county. This beauty helps B&Bs compete with more-urban attractions.

Fragmentation of rural land by nonrural uses also affects the tax base and government spending. Large tracts of land pay far more in taxes than the occupants require in government-service dollars. As more people arrive to live on ever smaller tracts of land, the taxes per acre are less able to cover the costs of increased government services the additional people require. At some point the tax rate must increase on all lands. This phenomenon is particularly true where fragmentation of land use reaches the townhouse stage of development. Higher taxes or industrialization appears to be the only remedy, neither of which is desirable in Rappahannock or is in keeping with the comprehensive plan.

How do we deter land-use fragmentation? First, we must vigilantly and vigorously defend the comprehensive plan and the county ordinances that translate the plan into specific actions on the ground. Fragmentation comes quietly, usually one small piece at a time: a special exemption here, an ordinance to accommodate someone’s desire there. Proposed changes to these documents must be examined carefully and openly.

Second, citizens can take steps to strengthen the ordinances in keeping with the intent of the comprehensive plan. These steps include making well-thought-out changes and additions to the county ordinances that will encourage the retention of large, contiguous blocks of land in agricultural, forest, and conservation use, regardless of the number of ownerships involved:

- 🌲 Increasing the minimum new-parcel size to 50 acres, as has been suggested in a Planning Commission open meeting
- 🌲 Matching the minimum acreage of an agricultural and forestal district to the minimum lot size
- 🌲 Developing a mechanism for formal interaction between landscape stakeholder groups, such as farm associations, B&B operators, and conservation groups.

While the impact of large-scale land development, such as Clevenger’s Corner, is obvious, the nibbling away of the rural landscape by fragmentation is hardly noticed until it is too late. Both have the same end result—when the rural landscape is gone, it’s unlikely to return. 🐾🐾

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RLEP's leadership changes

By JIM GANNON

Bob Lander, who has just stepped down as RLEP president, says he will be devoting a great deal of time to many civic and community ventures, from the Lions Club and the Scrabble School Foundation, to volunteer work in the county schools and Trinity Episcopal Church.

Paul Farmer, who was elected vice president of RLEP last November, moved up to president on January 26, succeeding Bob Lander, who resigned after more than three years as the leader of RLEP. Bob said he felt RLEP is in good shape and that he intends to remain active in League affairs.

Paul, 58, has been active in the League since moving to Rappahannock County in 2001. He has served as a director and chairman of the membership committee, and has contributed articles to *RLEP News*. Paul, who lives in Gid Brown Hollow with his wife Kathy Poush, is a lifelong environmentalist who said he hopes to "keep RLEP on the course" charted by his predecessor...and provide opportunities for everyone who loves the environment to participate in the preservation of this lovely place."

Paul said he and his wife selected Rappahannock County for their retirement because of its natural beauty, low population density, rural character, and "environmentally friendly history." Born in Washington, D.C., he was raised in suburban Maryland and served 32 years in the Central Intelligence Agency before moving here. He has degrees in political geography and wilderness geography from the University of Maryland, and is a collector and restorer of antique radios.

"Bob Lander deserves RLEP's sincerest thanks and a huge round of applause for his exceptional leadership over the last three-plus years," Paul commented.



MARIA CRISTINA POCUSH

New RLEP President, Paul Farmer, with wife Kathy Poush and granddaughter Zoe.

Also joining the leadership of the organization are five new directors elected at the annual membership meeting in October: Joe Oliver, an attorney who helped draft the latest revision of the League's bylaws; Roger Mello, principal of Rappahannock County High School; Alan Zuschlag, a real estate broker who also raises sheep on his farm near Amisville; Marc Malik, a former director and president of RLEP, who returns to the board; and Margaret Strawser, who has served as the League's Treasurer for the past year.

The board appointed Emery Lazar, formerly RLEP secretary, to replace Paul as vice president. Board member Beverly Hunter was elected secretary at the November 2004 board meeting but stepped down in March. Hal Hunter, a former board member, has been appointed to fill the vacancy.



Cyberspace Dreaming...



We are happy to report that visits to RLEP's Web site, www.RLEP.org, are growing steadily. From the site's initiation in mid-2004 to the end of the calendar year, it received almost 11,000

page views in more than 4,000 unique visits. The pages most often viewed were the RLEP home page, followed by the Calendar, Current Issues, Programs and Initiatives, Living Green, and Photo Gallery.

The most popular articles were those about mountain lions, Clevenger's Corner, cell towers, the lighting ordinance, Page county trash trucks, the Krebsler fund, native plants, the comprehensive plan, and alternative energy sources. Everything on the Web site but archived articles was viewed at least 60 times.

Although most Web site visitors were

located in the United States, viewers logged on from as far away as Australia, the Netherlands, Japan, and Argentina and other parts of the world. About 200 viewers found our site through Google searches.

We're updating the Web site weekly or as often as needed. In 2005, we plan to add many new articles and features. RLEP members are strongly encouraged to contact us at mail@RLEP.org with suggestions or requests for additions to the Web site. Your contributions and ideas will keep the site relevant and useful!

—KATHY POCUSH, WEBMASTER



Conservation Programs

RLEP begins spring nature walks

BY BOB LANDER

RLEP will begin a series of nature walks here in Rappahannock County on April 3. (See box at right.) This first walk will be at the property of Bruce and Susan Jones. Along with demonstrating how to attract wildlife, the walk will focus on how landowners can use the Conservation Reserve Enhancement Program (CREP) to return land damaged by cattle to its natural state.

The Joneses moved to Rappahannock County about 24 years ago, purchasing a property on Long Mountain Road. The property they bought had been used for grazing cattle, so native plants (primarily forest) had been removed and replaced with pasture and nonnative forage grasses. The cows had also destroyed many of the native species in the remaining forested parts of the property.

The Joneses brought with them a penchant for conserving, preserving, and restoring nature. Realizing that water was essential to having diverse

native species of plants and wildlife, their first move in bringing nature back to the property was to construct two ponds.

After putting in the ponds, the couple noticed that the number and diversity of species of wildlife had increased dramatically.

They added more native plant species and diversified the habitats on their land, which in turn attracted even more native species. Many birds not readily seen elsewhere in the county are now on the property, along with voles, frogs, foxes, and other wildlife. Bruce's dream is to restore the



PHOTO BY BRUCE JONES

Erosion caused by cattle grazing on Bruce and Susan Jones' leased property

Conservation Program Updates

Conservation Easements: The salability of Virginia land-preservation tax credits and the acceptance of two Rappahannock easements by the Land Trust of Virginia helped make 2004 an outstanding year for voluntary landscape protection in Rappahannock County. Major properties given new easement protection include Whippoorwill, Ben Venue, and lands owned by the McNear and Parrish families. As we go to press, 20,646 Rappahannock acres are protected by conservation easements—that's 15.2 percent of all privately owned land in the county.

Farmland Preservation Program (FPP): The county-appointed committee that oversees FPP has developed eligibility criteria for selling or buying development rights. In March, it approved its first farmer applicant for sale of a number of development rights on 300-acre farm in Rappahannock County. Other funding is in the works, with the ultimate goal of placing the farm in conservation easement.

Krebsler Fund for Rappahannock County Conservation: Since December 2004 the Krebsler Fund has assisted two landowners with limited means in placing their property in conservation easements. Currently the fund, which protects Rappahannock land from development by placing it in easement, is working toward its first annual fundraiser in September 2005. For more information, please contact Fran Krebsler at (540) 635-0821 or Alan Zuschlag at (540) 937-6124.

Small Watershed Protection Program: In January the Rappahannock Friends and Lovers of Our Watershed (RappFLOW) submitted to the National Fish and Wildlife Foundation a proposal for funding from the Small Watershed Protection Program, and RLEP has pledged \$1,000 in matching funds and a letter of commitment to support the project. For information on the new initiative and other water protection resources, go to the new RappFLOW Web site, www.rappflow.org.



PHOTO BY BRUCE JONES

A USDA staff member plants a tree in the eroded areas of the riparian (stream) edge of the Jones' leased property.

Removing cattle from land and reestablishing native vegetation can reverse the erosion process in two or three years.

For more on how farmers can take advantage of CREP, see "Farmers Can Save Money and Protect Our Water through CREP" in the spring 2003 issue of RLEP News, available on the Web at www.rlep.org/living_green/crep.html.

habitat to where quail will survive.

A year ago, Bruce noticed that their ponds were silting up. This caused a change in pond depth and the vegetation along the edges, which in turn caused the creatures living there to move on to more accommodating habitats. The Joneses found that the silting was a result of runoff from adjacent meadows. The streams that fed the ponds were carrying the soil from the meadows into the ponds.

Cattle were grazing in these meadows and drank from the streams. In the process, they broke down the stream banks, leaving the soil exposed to rain and wind...slowly eroding the entire area and sending the topsoil into the streams.

To reverse this process, the Joneses leased the land and had the cattle removed. Then, as part of CREP, the staff of the U.S. Department of Agriculture Field Office in Culpeper, which administers the program locally, developed a plan and planted native trees and shrubs in strategic areas. Full restoration will likely take years, but nature is slowly reversing the destruction brought about by the cattle.

According to the USDA's Web site, CREP "is a voluntary land retirement program that helps agricultural producers protect environmentally sensitive land, decrease erosion, restore wildlife habitat, and safeguard ground and surface water." The program offers rental payments to farmers who voluntarily remove streamside or wetland areas from agricultural production for 10 or 15 years, and the program reimburses most of the costs of buffering streams, lakes, and rivers from sedimentation and agricultural runoff.

While CREP was aimed at farmers who are still raising livestock, landowners who do not raise livestock, such as the Joneses, can also take advantage of the program to convert land that was formerly used for livestock back to its natural state. Even those leasing land, as the Joneses are, can take advantage of the rental component of CREP, as long as the lease runs at least as long as the number of years CREP requires land be out of production.

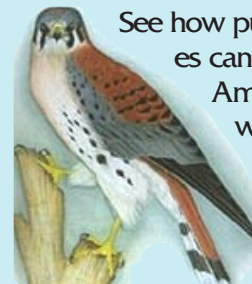
CREP can be used to protect streams, ponds, and wetlands from contamination from livestock, easing a continuing problem in the Rappahannock River watershed. For more information on the program, contact the USDA Field Office, 540-825-4200, ext. 108, or go to, or go on the Web to www.fsa.usda.gov/dafp/cepd/crep.htm.



SPRING NATURE WALK

Come to Bruce and Susan Jones' property for the first of RLEP's planned spring nature walks.

Walk trails and learn about wildlife habitat, plant diversity, and other factors needed to attract and hold the many species of wildlife that reside in our county.



American Kestrel

See how putting up bird houses can attract bluebirds, American kestrels, and wood ducks to your property.

Find out how you can use the Conservation

Reserve Enhancement Program to reclaim land damaged by cattle grazing.

To make these trips more pleasant and meaningful, we suggest a maximum of 25 people per walk. Each walk will take about 1-1/2 hours and will take place rain or shine. Bring your binoculars! We'll serve light refreshments.

You can choose among three different dates for this first nature walk:

Sunday, April 3, 2 p.m.

Monday, April 4, 3 p.m.

Thursday, April 7, 3 p.m.

Please contact the Joneses to make your reservation:

540-675-3152 or bsjonz@direcway.com



Habitat fragmentation threatens wildlife

Not only does land-use fragmentation threaten rural economies and culture (see page 1), it also threatens our native wildlife.

Loss and fragmentation of habitat due to urban sprawl, rather than population increases, are the most significant factors in the decline of our native species, according to the Natural Resources Defense Council. With ever-shrinking land parcels, native species are often faced with trying to sustain their populations on a patchwork mosaic of varied habitat. Fragmentation most often results from timber harvesting, development, and roads.

Since Virginia was primarily forest before humans arrived, its native species are mainly woodland animals. According to the Virginia Department of Forestry (VDOF), the amount of land in the commonwealth covered by forest was 61 percent in 1999, up from 56 percent in 1940 but down from 63 percent in 1976. This loss of forest can mean decline and even extinction among our native species.

Albert Todd (*Journal of Forestry*, February 1999) summed up the impact of forest fragmentation on wildlife: “Forest fragmentation can disrupt animal travel corridors,...promote the invasion of exotic vegetation, expose forest interiors, and create conflicts between people and wildlife. Habitat loss reduces the number of many wildlife species and totally eliminates others.”

Some species need large or varied habitats. Species that prefer the forest interior, and are either wide-ranging (such as migratory songbirds and black bears) or that can’t easily disperse (such as reptiles and amphibians) are more likely to be hurt by habitat fragmentation.



Turtles are long lived and slow to breed. They can end up road kill before they have a chance to replenish themselves.

Possible Strategies for Halting Habitat Fragmentation

- Educate the public to the health and economic value of forests—build markets for forest ecosystem services, such as forest-based carbon stores and watershed services.
- Change the tax code to encourage careful management of habitat over the long term.
- Give landowners ways to keep cash coming in can keep areas of land intact. The Nature Conservancy is experimenting with buying forestry rights through its Forest Bank™ program.

Water turtles, for example, might not be able to get from their normal aquatic habitat to upland nesting habitat, while amphibians might have the reverse problem. Animals confined to small patches of habitat also often deplete their food supply sooner and are forced to eat lower-quality food, or to search for food in areas where there was more risk of being killed by a predator.

One survey shows drops up to 88 percent among more than two dozen songbird species over the past decade. As crucial stopover areas for migratory songbirds are fragmented, more of these birds end up in small forested areas where they may not be raising enough young to sustain their populations.

Some species do well with a mixture of open, brushy, and wooded areas caused by fragmentation. They are generally more opportunistic, prefer forest edge, are very mobile, or have very small-scale habitats. These include deer, squirrels, and rabbits.

Some prey species also benefit from habitat fragmentation, including raccoons, snakes, and blue jays. These, along with cats, easily prey upon migratory songbirds and other small species forced to forest edges. According to VDOF, “the absence or deterioration of suitable habitat, *not predators*, is the primary reason that game populations are below desired levels. Only when habitat conditions are marginal and escape cover is lacking, can predation be excessive.”

—PAM OWEN, EDITOR

(For a longer version of this article, go to www.rlep.org/pubs/index.html.)

Spring Currents RLEP

As I prepare my first “Currents” column, we are still largely in winter’s grasp here next to the Blue Ridge, as evidenced by the thick blanket of snow outside my window. But that will be changing by the time this spring issue of RLEP News arrives in your mailbox.

I am a bit surprised to find myself now leading RLEP into 2005, but fortunately our league has been well led by our retiring president, Bob Lander. So my first job is to just not mess things up.

Beyond that, I must say how pleased I am to have so much strong support from the outgoing president and the outgoing directors (not to mention the entire board), each of whom have remained active in RLEP affairs and are quick to respond to any call for assistance. It is also reassuring that members of RLEP and nonmembers in the general community have stepped forward with advice on where RLEP should head next, and have even offered to lead on environmental projects for RLEP and the community.

I don’t expect change in RLEP direction to be as dramatic as the change here from winter to spring, but I take seriously every offer of help and every thought on our mission. If you have an opinion on our direction, or want to help with a project that you think needs attention, contact me or any RLEP director. The League cannot work on every local environmental issue, but I guarantee that each of us on the board wants to know what is most important to our members and to Rappahannock citizens. And we will carefully consider where to place our energies and how to be as effective as we can in the preservation of the county’s natural and cultural environments.

Bob Lander will continue to lead on the RLEP-initiated project to improve the Washington courthouse grounds. This is a community project-with involvement from several organizations and the public. Marc Malik, a previous RLEP president with considerable professional landscaping experience, is our representative to the project. Cleaning and restoration of the Confederate monument is the centerpiece of this project, but it is also likely to involve new and upgraded landscaping, with an

emphasis on native Virginia plants.

Key to this endeavor is the concurrence of those who work in or near the courthouse complex and of the population of Washington in general. We hope the Washington Planning Commission and Town Council (in addition to the county Board of Supervisors) will, therefore, take an active role in the process as the project moves forward.

The RLEP Board of Directors held an all-day conference at Hearthstone School on March 19 to review our mission statement and to develop an annual plan for RLEP operations over the next 12 to 18 months. Participation was lively, and we came away with numerous agreements about how RLEP will be organized and led and about initiatives that will be taken in 2005.

Water quality and watershed management continue to be issues in the news here. RLEP is giving matching funds and a letter of commitment to RappFLOW for its proposed research demonstration project on watershed management practices on the upper Thornton River (see “Conservation Program Updates” on page 4).

Another water-related event in the county is the commissioning of the Water Quality Advisory Committee by the Board of Supervisors. The committee will meet every other month under the leadership of Reid Folsom. Contact Reid for more information (800-324-2524 or reidfolsom@yahoo.com).

—PAUL FARMER, PRESIDENT

Check Your Membership Expiration Date

Please check the mailing address block on this issue of *RLEP News*. The **EXP: Date** tells you when your RLEP membership expires. Please don’t let your membership lapse. You can also renew early—we’ll extend your membership for another full year regardless of when you renew. And remember that your contribution is tax deductible.

THANKS FOR YOUR MEMBERSHIP CONTRIBUTION!

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Issue Updates

Trash Trucks: They may soon reappear on Rappahannock County roads. The Battle Creek Landfill in Page County was closed a year ago. According to the *Page News & Courier*, the Virginia Department of Environmental Quality (DEQ) said the operator, National Waste Services (NWS) of Virginia, had violated the county's solid-waste permit. NWS said it had no voice in the revocation process and was suing the county and each of the five supervisors for lost revenue in the amount of \$38 million and \$1 million, respectively. Page County then filed a \$72 million claim against NWS. On March 1, 2005, the county agreed to pay the financial backers of NWS \$8.5 million to settle everything so the county could take over the landfill and correct deficiencies (at an additional cost of \$3.5 million). Pending certain expected court approvals, the settlement allows Page County to reopen and operate the landfill. DEQ is letting the county bring in up to 250 tons of trash per day, which the county would like to increase to 750 tons but would require DEQ approval. At its peak, NWS was bringing in up to 1,500 tons per day. The county has enough local and regional suppliers of trash under the current maximum limit that it does not need to accept refuse from out of state. NWS declared bankruptcy before the closing of the landfill. Page County has been paying other operators about \$30,000 a week to transport its trash elsewhere. Page County will likely form a Public Service Authority (PSA) to run the landfill and would like to reopen it, possibly by July.

Cell-Phone Towers: Six towers are operational. The seventh, the Miller grain silo, along Route 211 near Washington, has still not been approved by the FCC. If and when approved, it must go through the county permitting process.

Electronics Recycling: As an environmental measure, Virginia state law now forbids putting electronic equipment in with regular trash or recycling because of the heavy metals and other toxins in circuit boards. Rappahannock County has arranged for a company to haul away such electronic equipment from the Amissville and Flatwood trash sites to a certified recycler. The county is charging below-cost fees for the recycling: computers, \$5; UPS backup systems, \$7; monitors and small copiers, \$10; televisions, \$15; large, standalone copiers, \$30. There are no charges for keyboards, mice, printers, cell phones, or cabling.

Washington's Water and Sewer Systems: The Town of Washington is moving ahead with water and sewer planning, a main goal of which is to enlarge the capacities of both systems. An important feature of the plan is the construction of a sewage treatment plant that will likely result in treated effluent going into the Rush River. This is certainly preferable to an alternative of piping sewage to Sperryville for treatment there, which could intensify commercial and residential development pressures along the Rt. 211 corridor between the town and village. Questions remain as to how much sewage treatment capacity is needed for current and projected future town users; and whether discharge of treated effluent into the Rush is preferable to insertion of treated waste into the ground, a third alternative. Concerned citizens and landowners should share their thoughts on this issue with the Washington Town Council. RLEP will continue to monitor this issue.



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